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Chuck E. Cheese Cyberamic Character

Chuck E. Cheese, the furry host of Pizza Time Theatre, is one of the computer-controlled, mechanical robots that make up the Pizza Time Players. These animated performers, called Cyberamics, entertain visitors at the many Pizza Time Theatres throughout the U.S. and other parts of the world.

Pizza Time Theatre's animation system is the result of a $2.5 million development effort centering around extensive use of computers. A DEC PDP 11/23 is used to program the characters' movement and lighting cues to voice and music recordings. It takes five hours of programming for every one minute of recorded skit material.

When a skit is completed, the master tape is copied for each Theatre. Each set of Cyberamics has a TEAC X-7 Mark II tape deck in its control console which takes the movement command and decodes it to a 24-volt direct current control signal, which is then sent over 26-conductor flat cable to the character's pneumatic solenoid printed circuit assembly. The voltage controls the solenoid, allowing air to pass to the pneumatic cylinders throughout the mechanical skeleton to create movement. This movement is synchronized to the audio portion of the show through the use of a microprocessor.

A unique feature of this system is the automatic volume control. The noise level of the surrounding area is analyzed and the audio level of the show is adjusted automatically.

Continued on next page

The character mechanism is composed of a variety of products. Much of the skeleton is aluminum. Oil-impregnated bronze bearings are used at pivotal points for ease of assembly and maintenance. Pneumatic cylinders of different lengths and diameters are used to create movement. Some of the parts are unique in their use but not in their design. For example, the eyes are made from drilled-out croquet balls, and the tail pivot is actually a ball joint from an American Motors Pacer.

Character headpieces are built on rigid skeletal framework made of quarter-inch and half-inch European birch plywood. To provide contours in the face and body, one-inch thick 1.6-pound density foam is upholstered to the framework. The foam is then covered with a variety of materials to achieve the costume character.

The cutaway Cyberamic shown on the cover may be seen in operation at the Electronics Museum at Foothill College.

OVERSEAS CONTROL CENTRE

Chuck E. Cheese Cyberamic Character

Character Mechanism model #PTT 000-0200-20
Control Center model #PTT 000-0169-80
Cosmetic Design model #000-0075-20

Chuck E. Cheese, the furry host of Pizza Time Theatre, is one of the computer-controlled, mechanical robots that make up the Pizza Time Players. These animated performers, called "Cyberamics," entertain visitors at the many Chuck E. Cheese's Pizza Time Theatres throughout the U.S. and other parts of the world.

Nolan Bushnell, founder of Atari and inventor of the first commercially successful video game, Pong, launched Pizza Time Theatre in May 1977 with the opening of the San Jose center on Winchester Boulevard.

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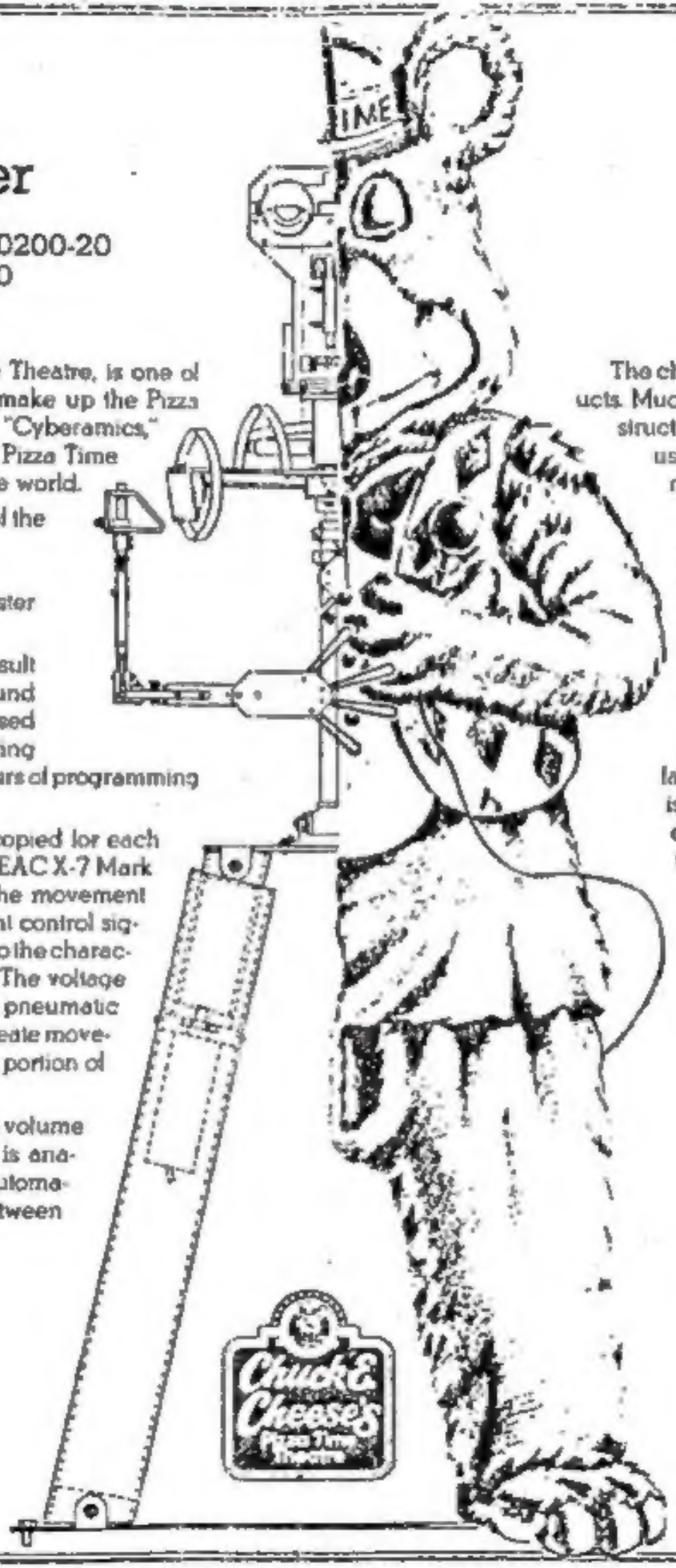
A unique feature of this system is the automatic volume control. The noise level of the surrounding area is analyzed and the audio level of the show is adjusted automatically. Background music can also be played between skits and announcements can be made.



The character mechanism is composed of a variety of products. Much of the skeleton is aluminum for its light weight and structural integrity. Oil-impregnated bronze bearings are used at pivotal points for ease of assembly and maintenance.

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Character headpieces are built on rigid skeletal framework made of quarter-inch and half-inch European birch plywood. To provide contours in the face and body, one-inch thick 1.6-pound density foam is upholstered to the framework. The foam is then covered with a variety of materials and notions to achieve the costume character.

DONATED BY PIZZA TIME THEATRE INC.
SUNNYVALE, OCTOBER 1982

Project Coordinator: Tina Ahmann	Recording Engineer: James Barnes	Voice: John Widelock
Mechanical: Mike Twigg, Doug Wolf	Animation: Randy Nelson, Jeff Rist	Cosmetic Design: Tina Ahmann, Jul Kaman
Electrical: Pete Mehrle	Design, Illustration: Karen Mitchell, Jeffrey R. Severs	

TECHNOLOGY THAT ENTERTAINS

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